Amendments to the Claims:

This listing of claims will replace all prior versions of claims in the application:

1. (Currently amended) A method of determining a television viewer's viewing habits, ~~the method which comprises~~ comprising:

recording a viewer's monitor behavior with data item variables including watch~~ed~~ channel, watch~~ing~~ start time, and at least one of watch~~ing~~ date and watch~~ing~~ duration;

from a server-side system, inputting historical data information regarding demographic information tagged to the viewer;

inputting program guide information; and

at a client-side system, associating the program guide information with the viewer's monitor behavior and defining therefrom a knowledge base with demographic cluster information of the viewer in terms of statistical state machine transition models.

2. (Currently amended) The method according to claim 1, wherein ~~the step of~~ defining the knowledge base comprises calculating [[a]] the parameterized transition matrix defining the viewer's viewing habits, the parameterized transition matrix containing information of program transitions initiated by the viewer, and wherein the row number and the column number of the element represent the first and the second states.

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3. (Currently amended) The method according to claim 2, ~~which comprises~~ further comprising defining at least two concurrent transition matrices including a channel matrix and a genre matrix.

4. (Currently amended) The method according to claim 2, ~~which comprises~~ further comprising defining the transition matrix as a two-dimensional matrix with transitions from television channels to television channels in temporal form.

5. (Currently amended) The method according to claim 1, ~~which comprises~~ further comprising providing feedback information with the viewer's monitor behavior by recording a click stream.

6. (Currently amended) The method according to claim 1, ~~which comprises~~ further comprising parameterizing the viewer's monitor behavior with a pseudo hidden Markov process.

7. (Currently amended) The method according to claim 18, ~~which comprises~~ further comprising defining the double random process with a plurality of dimensions, and determining parallel statistical state machine transition events in at least two of three state categories including channel, genre, and title.

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8. (Currently amended) A computer-readable medium encoded with a plurality of processor executable instructions for implementing a function of:

capturing state transitions by defining monitor behavior in a plurality of statistical state machine families each representing the viewing behavior of a particular viewer or demographic group;

at a client-side system, combining the statistical state machine families into global statistical state machines defined in a global probability density function;

updating and reinforcing the global probability density function upon determining that a given probability function has a higher confidence level than a previous probability density function; and

outputting a global profile based on the global probability density function, wherein the global profile is suitable for determining programming content of a television server.

9. (Currently amended) The computer-readable medium according to claim 8, wherein the state transitions represent a television viewer's monitor behavior and the statistical state machines are selected from the group comprising consisting of watched channel, watching start time, and at least one of watching date and watching duration.

10. (Currently amended) The computer-readable medium according to claim 8, wherein the global profile represents demographic cluster information of a viewer in terms of the a

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statistical state machine transition matrix.

11. (Currently amended) The computer-readable medium according to claim 8, wherein the state machines are defined in a parameterized transition matrix defining the viewer's viewing habits, the transition matrix ~~containing~~ comprising an element indicating information of a program transition[[s]] initiated by the viewer.

12. (Currently amended) The computer-readable medium according to claim 11, wherein the parameterized transition matrix is one of at least two concurrent transition matrices including a channel matrix and a genre matrix.

13. (Currently amended) The computer-readable medium according to claim [[8]]11, wherein the parameterized transition matrix is a two-dimensional matrix with transitions from television channels to television channels in temporal form.

14. (Currently amended) The computer-readable medium according to claim 8, ~~configured to parameterize~~ further comprising instructions for parameterizing the viewer's monitor behavior with a pseudo hidden Markov process.

15. (Currently amended) The computer-readable medium according to claim 8, ~~which~~

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~~comprises~~ further comprising instructions for defining ~~the~~ a double random process with a

plurality of dimensions, and determining parallel statistical state machine transition events in at

least two of three state categories including channel, genre, and title.

16. (Currently amended) The computer-readable medium according to claim 10, ~~which~~

~~comprises~~ further comprising instructions for:

at [[a]] the client-side system, associating program guide information with the viewer's

monitor behavior and defining therefrom a knowledge base with demographic cluster

information of the viewer in terms of statistical state machine transition matrices.

17. (Currently amended) The method ~~recited in~~ according to claim 1, wherein the data

items have a probability function with a confidence level, ~~and~~ the method further ~~comprises~~

comprising:

updating the historical data information upon determining that a given data item has a

probability function with a higher confidence level then a previous data item.

18. (Currently amended) The method ~~recited in~~ according to claim 6, wherein the pseudo

hidden Markov process is a double-random process.

19. (Currently amended) The method ~~recited in~~ according to claim 18, further

comprising:

defining a low level statistical state machine modeling a behavioral cluster and a top-level statistical state machine with active behavioral clusters and an interaction among the active behavioral clusters.

20. (Currently amended) The computer-readable medium ~~recited in~~ according to claim 14, wherein the pseudo-hidden Markov process is a double-random process.

21. (Currently amended) The computer-readable medium ~~recited in~~ according to claim 20, further comprising:

defining a low-level statistical state machine modeling a behavioral cluster and a top-level statistical state machine with active behavioral clusters and an interaction among the active behavioral clusters.

22. (Currently amended) The method ~~recited in~~ according to claim 2, wherein the parameterized transition matrix is in a temporal form.

23. (Currently amended) The method ~~recited in~~ according to claim 2, wherein the parameterized transition matrix includes a first matrix for TV watching activities and a second matrix for TV channel surfing.

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24. (New) The method of claim 1, wherein the statistical state machine transition models employ a parameterized transition matrix, and wherein the transition matrix comprises an element indicating a transition from a first state to a second state, and wherein each of the first and second states is indicated by one of a row and a column of the transition matrix.

25. (New) The computer readable medium of claim 8, wherein the instructions further comprise describing the state transitions in a parameterized transition matrix.

26. (New) The computer readable medium of claim 25, wherein the transition matrix comprises an element indicating a transition from a first state to a second state, and wherein each of the first and second states is indicated by one of a row and a column of the transition matrix.